

What is claimed is:

1. A method for generating a reference signal including the steps of
  - 5 providing an input signal,
  - parsing the input signal into a plurality of split signals in accordance with a predetermined criteria,
  - 10 generating split reference signals for each of at least two of the split signals,
  - combining a plurality of the split reference signals into a single reference signal.
- 15 2. A method for generating a reference signal including the steps of
  - providing an input signal,
  - 20 parsing the input signal into a plurality of split signals in accordance with a predetermined criteria,
  - generating a reference signal in accordance with a combination of the split signals.
- 25 3. The method of claim 2 further including the step of
  - developing a plurality of reference signals in accordance with the plurality of split signals,
  - 30 supplying the plurality of reference signals to the generating step.
4. The method of claim 2 wherein the input signal is a plurality of signals.
- 35 5. The method of claim 1 wherein the input signal is a plurality of signals.
6. The method of claim 1 wherein the predetermined criteria used in the

parsing step is a bandsplit filter.

7. The method of claim 6 further including
  - 5 providing a plurality of bands in the bandsplit filter, and
  - providing adjustable output levels for each band of the bandsplit filter.
8. The method of claim 6 further including
  - 10 using the adjustable output levels for equalization.
9. The method of claim 6 wherein the combining step includes combining at least some of the bands of a bandsplit filter.
10. The method of claim 9 wherein the combining step includes adding of the split signals.
11. The method of claim 10 further including the step of scaling the split signals prior to the combining step.
12. The method of claim 11 further including providing a soft clip on the split signals following the combining steps.
13. The method of claim 2 wherein the predetermined criteria used in the parsing step is a bandsplit filter.
14. The method of claim 13 further including
  - 30 providing a plurality of bands in the bandsplit filter, and
  - providing adjustable output levels for each band of the bandsplit filter.
15. The method of claim 14 wherein the combining step includes combining at least some of the bands of a bandsplit filter.
16. The method of claim 15 wherein the combining step includes adding of the

split signals.

17. The method of claim 16 further including the step of scaling the split signals prior to the combining step.

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18. The method of claim 17 further including providing a soft clip on the split signals following the combining steps.

19. Apparatus for generating a reference signal comprising

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an input signal,

signal splitter which parses the input signal into a plurality of split signals in accordance with a predetermined criteria,

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reference signal generator for generating split reference signals for each of at least two of the split signals,

combiner for combining a plurality of the split reference signals into a single reference signal.

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20. The apparatus of claim 19 wherein the signal splitter is a band split filter.

21. The apparatus of claim 19 wherein the input signal is a plurality of inputs.

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22. The apparatus of claim 20 further comprising

a plurality of bands in the bandsplit filter, and

output means for providing adjustable output levels for each band of the bandsplit filter.

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23. The apparatus of claim 20 wherein the combiner combines at least some of the bands of the bandsplit filter.

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24. The apparatus of claim 23 wherein the combiner adds at least some of the split signals.

25. The apparatus of claim 24 further comprising amplitude adjuster for scaling the split signals prior to the combiner.
- 5 26. The apparatus of claim 23 further comprising a soft clip on the output of the combiner.
27. Apparatus for generating a reference signal including
- 10 an input signal,
- signal splitter which splits the input signal into a plurality of split signals in accordance with a predetermined criteria, and
- 15 reference signal generator to generate a reference signal in accordance with a combination of the split signals.
28. The apparatus of claim 27 wherein the signal splitter develops a plurality of reference signals in accordance with the plurality of split signals and
- 20 supplies the plurality of reference signals to the reference signal generator.
29. The apparatus of claim 27 wherein the input signal is a plurality of signals.
30. The apparatus of claim 27 wherein the signal splitter is a bandsplit filter
- 25 31. The apparatus of claim 30 further comprising
- a plurality of bands in the bandsplit filter, and
- 30 output means for providing adjustable output levels for each band of the bandsplit filter.
32. The apparatus of claim 30 wherein the combiner combines at least some of the bands of the bandsplit filter.
- 35 33. The apparatus of claim 30 wherein the combiner adds at least some of the split signals.

34. The apparatus of claim 33 further comprising amplitude adjuster for scaling the split signals prior to the combiner.
- 5 35. The apparatus of claim 34 further comprising a soft clip on the output of the combiner.